



BEMIDJI
STATE UNIVERSITY

STUDENT ACHIEVEMENT 2021 CONFERENCE



GREATNESS **ACHIEVED**

APRIL 7, 2021 • BEMIDJI STATE UNIVERSITY



MINNESOTA STATE



2021 CONFERENCE SCHEDULE – APRIL 7, 2021

10 – 10:45 a.m. Opening Ceremony (Zoom: <https://minnstate.zoom.us/j/97975632518>)

Land Acknowledgement

Welcome - Dr. Travis R. Ricks, Conference Director

Welcome - Dr. Faith Hensrud, President, Bemidji State University

Star Spangled Banner – Leandra Craigmile, 2018 alumna, Vocal Music Performance and Vocal Music Education

Conference Poem by Meghan Trimble, Creative and Professional Writing Major

Introduction to Musical Piece Performed by Brennan Paulson: Curtis Olson

Themes and Variations on Carnival of Venice. Performed by Brennan Paulson, Instrumental Performance Major

Conference Historical Context Mary Ann Reitmeir M.S. First director of the Student Achievement Conference 21 years of Achievement

Introduction to awards by Dr. Travis R. Ricks

Student Achievement Award: Lacie Hines (Dr. Thomas Dirth) and Jeffrey Erickson (Kristina Cirks & Dr. Michael Hamann)

Emeriti Achievement Award: Donna Palivec & Muriel Gilman (Dr. Jim White)

Northern Minnesota Achievement Award: Jennifer Anderson & Jennifer Kovach (Dr. Rebecca Hoffman)

Closing Remarks by Dr. Travis R. Ricks

10:45 – 11 a.m. Break

11 – Noon Oral Presentations (Zoom links listed with presentations)

Noon – 1 p.m. Break

1 – 2 p.m. Poster Presentations

Gather Town: <https://gather.town/app/qm4FjX10GISbfj9J/BSU%20SAC.%202021>
password: BSUSAC21



WELCOME



Dr. Travis R. Ricks, Conference Director

Welcome to Bemidji State University's 21st Annual Student Achievement Conference!

In the midst of a global pandemic this event is an opportunity for Bemidji State University students, staff, professors, and administrators to demonstrate the resiliency of our educational system. The presentations vary in format and come from many different academic disciplines, but all are a celebration of academic inquiry and rigor. These presentations are advancements in art, education, science, and humanities. The student presenters, with the help of their mentors, have done something phenomenal and I am grateful to welcome you to this virtual event.

Thank you for coming and please enjoy this day dedicated to the celebration of achievement!



Dr. Faith Hensrud, President, Bemidji State University

Welcome to the 2021 Student Achievement Conference at Bemidji State University. It is exciting to celebrate this day of discovery as we mark another milestone of success in the intellectual development and personal growth of our students. The creative, virtual presentations that you will experience today, are a testament to BSU's ongoing mission of teaching, exploration, and reflection — all crucial to fulfilling our vision of preparing students to lead inspired lives. This event is a culmination of learning and accomplishment across multiple disciplines as evidenced by the research, innovation, and creativity seen in the student's presentations, posters, and performances. The conference reflects the interactive relationship between students and faculty and exemplifies the university's rigorous and engaging academic environment. I encourage you to take part in these events, and to engage with our students as they explain or present their projects. We are very proud of our students and their fine work.



ORAL PRESENTATIONS

11:00 – 11:20

Use Zoom Link listed with the presentation

Zoom Link: <https://minnstate.zoom.us/s/92395305836>
Facilitator: Amber Laffin
Title: Defining and Implementing Total Quality Management Principles in a Business
Presenters: Amanda Robeck, Jory Danielson
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/s/98664529922>
Facilitator: Angie Fournier
Title: Parking Problems Data Evaluation & Solution
Presenter: Micah Kashevaroff
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/s/92001048424>
Facilitator: Bill Joyce
Title: Quality Management Systems in Business
Presenters: Angela Lestat, Randy Kemarjh
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/s/96944293388>
Facilitator: Kjerstin Owens
Title: Pancreatic Cancer Cells Show Increase in Metabolic Activity with Succinate
Presenter: Molly Erickson
Sponsor: Kjerstin Owens

Zoom Link: <https://us02web.zoom.us/j/82983512656>
Facilitator: Lukas Szrot
Title: ISO Systems and the Different Industries They Have Impacted
Presenters: Cole Todavich, Allison Maruska
Sponsor: Mahmoud Al Odeh

Zoom Link: <https://minnstate.zoom.us/s/99007725678>
Facilitator: Mahmoud Al-Odeh
Title: Printing Services In-house vs. Outsourcing
Presenter: Tanner Brehmer
Sponsor: Mahmoud Al-Odeh



ORAL PRESENTATIONS

11:20-11:40

Use Zoom Link listed with the presentation

Zoom Link: <https://minnstate.zoom.us/j/92395305836>
Facilitator: Amber Laffin
Title: Analyzing Relapse Rates for Ex-Inmates After Completing Chemical Dependency Treatment within the Institution
Presenter: Hannah Mayer
Sponsor: Amber Laffin, Kristina Cirks

Zoom Link: <https://minnstate.zoom.us/j/98664529922>
Facilitator: Angie Fournier
Title: Mental Health in the Year of COVID-19
Presenters: Ife Adebola, Ashmita Neupane, Allyson Straus, Kyle Looft, Tanner Bellrichard, Zoe Carrasco, Gregory Gentry
Sponsor: President Hensrud

Zoom Link: <https://minnstate.zoom.us/j/92001048424>
Facilitator: Bill Joyce
Title: Measurement System Analysis
Presenters: Eric Maas, Dillon Stuntebeck
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/j/96944293388>
Facilitator: Kjerstin Owens
Title: Feasibility Study of FrameCAD
Presenters: Bradyn Dremmel, Anthony Fiecke
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/j/92001048424>
Facilitator: Lukas Szrot
Title: Feasibility Study: Agriculture Equipment Business
Presenter: Justin Sahai
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/j/99007725678>
Facilitator: Mahmoud Al-Odeh
Title: Implementing OSHA's 1910.1200 Hazard Communication Standard
Presenter: Ryan Makela
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/j/93626434368>
Facilitator: Travis Ricks
Title: A Short Life and a Merry One: The Golden Age of Piracy
Presenter: Matt Merklng
Sponsor: Daniel Allosso



ORAL PRESENTATIONS

11:40 – 12:00

Use Zoom Link listed with the presentation

Zoom Link: <https://minnstate.zoom.us/j/92395305836>
Facilitator: Amber Laffin
Title: Environmental Standards Improving Quality in Industry
Presenter: Erik Sistad
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/j/98664529922>
Facilitator: Angie Fournier
Title: Hi I'm Mentally Ill: A look into Mental Illness
Presenter: Alyson Sveeggen
Sponsor: Season Ellison

Zoom Link: <https://minnstate.zoom.us/j/92001048424>
Facilitator: Bill Joyce
Title: Using Quality Control Documents in the Machining Field
Presenter: Ryan Barnier
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/j/96944293388>
Facilitator: Kjerstin Owens
Title: Bemidji State University Parking Case Study
Presenter: Michael Doppler
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/j/92001048424>
Facilitator: Lukas Szrot
Title: Investing in Students' Time for Returns
Presenters: Ryce Skime, Timothy Brandon
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/j/99007725678>
Facilitator: Mahmoud Al-Odeh
Title: Quality Analysis: Capability Study of Production Panel Saws
Presenter: Anthony Johnson, Brendan Beaulieu
Sponsor: Mahmoud Al-Odeh

Zoom Link: <https://minnstate.zoom.us/j/93626434368>
Facilitator: Travis Ricks
Title: Adopting ISO 9001 Certification in the Hospitals
Presenter: Grant Struss
Sponsor: Mahmoud Al-Odeh



POSTERS

1 – 2 p.m.

Julie Larson Room Facilitator

Gather Town Link: <https://gather.town/app/qm4FjX10GISbf9J/BSU%20SAC.%202021>

Password: BSUSAC21

Title: The International Automotive Task Force (IATF) Quality Management Systems

Poster #: 1

Presenter: Andrew Peterson, Dustin St. Arnold

Sponsor: Mahmoud Al-Odeh

Title: Non-Conformance Analysis in Manufacturing Settings

Poster #: 2

Presenter: Ethan Beckler, Oliver Israel

Sponsor: Mahmoud Al-Odeh

Title: A Research Paper of the Gemba Walk process

Poster #: 3

Presenter: Reed Korb, Theo Staggert

Sponsor: Mahmoud Al-Odeh

Title: Reducing the Drive-Thru Wait Time

Poster #: 4

Presenter: Houston Walsh, Kaleb Stevens

Sponsor: Mahmoud Al-Odeh

Title: Recycling in Bemidji: Where it is and Where it can be

Poster #: 5

Presenter: Alysha Beaulieu, Cole Lewison

Sponsor: Mahmoud Al-Odeh

Title: The Effect of Quality on Small Businesses

Poster #: 6

Presenter: Chiangsee Yang, Gardyaratu Freeman

Sponsor: Mahmoud Al-Odeh

Title: Is There a Relationship Between Aquatic Vegetation and Amphipod Stocking Mortality?

Poster #: 7

Presenter: Alaina Taylor

Sponsor: Hafs Andrew

Title: Potamogeton Crispus Growth Compared to Potamogeton spp.

Poster #: 8

Presenter: Ryan Angell

Sponsor: Hafs Andrew

Title: Factors Influencing Aquatic Invertebrate Diversity in Mine Pit Lakes Along the Mesabi Iron Range

Poster #: 9

Presenter: Jeremy Laurich

Sponsor: Andrew Hafs

Title: Effects of Temperature and Depth on Aquatic Plant Species Abundance Along Lake Bemidji

Poster #: 10

Presenter: Emily Wollenweber

Sponsor: Andrew Hafs



POSTERS

1 – 2 p.m.

Julie Larson Room Facilitator

Gather Town Link: <https://gather.town/app/qm4FjX10GIsbfj9J/BSU%20SAC.%202021>

Password: BSUSAC21

Title: Stress Response of Largemouth and Smallmouth Bass: Barbless Hooks vs. Barbed Hooks C & R
Poster #: 11
Presenter: Wesley Steinmetz, Carson Tembrock
Sponsor: Andrew Hafz

Title: Reproductive Success in Eastern Bluebirds and Tree Swallows: Nest Box Monitoring in Bemidji, Minnesota
Poster #: 12
Presenter: Victoria Simons
Sponsor: Brian Hiller

Title: Mammalian Activity Patterns and Temporal Segregation in a Northern Conifer Forest
Poster #: 13
Presenter: Ashley Harris
Sponsor: Haus Jacob

Title: Comparing Expression of Succinate Dehydrogenase Genes in Pancreatic Cancer vs. Normal Cells
Poster #: 14
Presenter: Katija Ward
Sponsor: Kjerstin Owens

Title: Effects of Mitochondrial Antioxidants Using Normal Skin Fibroblasts
Poster #: 15
Presenter: Megan Flateland
Sponsor: Kjerstin Owens

Title: Oxidative Phosphorylation Protein Expression in Pancreatic Cancer Cells
Poster #: 16
Presenter: Erin Sollars
Sponsor: Kjerstin Owens

Title: Fluorescent Probe to Detect Hydrogen Sulfide
Poster #: 17
Presenter: Kyle Derby
Sponsor: Peterson Katie

Title: Determining the Concentration of Vitamin C and Manganese in Emergen-C Packets
Poster #: 18
Presenter: Tori Oas, Emily Quast, Hannah Mayer
Sponsor: Keith Marek



POSTERS

1 – 2 p.m.

Julie Larson Room Facilitator

Gather Town Link: <https://gather.town/app/qm4FjX10GfSbf9J/BSU%20SAC.%202021>

Password: BSUSAC21

Title: Fluorescent Probe for the Selective Detection of Selenocysteine
Poster #: 19
Presenter: Claudia Vincent, Serianna Lindstrom
Sponsor: Katie Peterson

Title: Instrumental Determination of Fluoride and Methyl Salicylate
Poster #: 20
Presenter: Jeff Otterstatter, Nadia Gordon
Sponsor: Keith Marek

Title: Calcium Content in Coffee
Poster #: 21
Presenter: Ellen Teiken, Leah Schrank
Sponsor: Keith Marek

Title: The Overlap of Ableism and Speciesism
Poster #: 22
Presenter: Justin Sawatzke
Sponsor: Fournier Angela

Title: Traditional Masculinity and Help Seeking Behaviors
Poster #: 23
Presenter: Casey Johnson
Sponsor: Sarah Cronin

Title: Deconstructing the Relationship Between Dehumanization and Disability
Poster #: 24
Presenter: Rebekah Asp
Sponsor: Thomas Dirth

Title: A Breed Apart: The Connection Between Breed-Specific Legislation and Racism
Poster #: 25
Presenter: Jenny Wilson
Sponsor: Angela Fournier

Title: Catholic Voting Realignment: Social Issues and Partisan Change
Poster #: 26
Presenter: Benjamin O'Brien
Sponsor: Patrick Donnay



POSTERS

1 – 2 p.m.

Julie Larson Room Facilitator

Gather Town Link: <https://gather.town/app/qm4FjX10GfSbfj9J/BSU%20SAC.%202021>

Password: BSUSAC21

Title: Partisan Trust in Social Media
Poster #: 27
Presenter: Kenneth Morris
Sponsor: Pat Donnay

Title: The Financial Facet to Sino-African Cooperation: Analyzing Potential Motivations Behind Chinese Investment in African Countries
Poster #: 28
Presenter: Jacob Carnevale
Sponsor: Patrick Donnay

Title: Emotional Motivation: How Anger, Fear, Hope and Pride Impact Women's Political Participation
Poster #: 29
Presenter: Ashley Martin
Sponsor: Patrick Donnay

Title: Dillon Rule States versus Home Rule States: Do the Different State Systems Make an Impact on Addressing COVID-19?
Poster #: 30
Presenter: Jason Kolb
Sponsor: Donnay Pat

Title: Advanced Topic in Quality – TL 9000
Poster: #31
Presenters: Douglass Adams, Heidi Schroeder
Sponsor: Mahmoud Al-Odeh



STUDENT ACHIEVEMENT COMMITTEE

TRAVIS RICKS
TAMMY MAYER
ANGIE FOURNIER
JORDAN LUTZ
PETE MCDONNELL
KJERSTIN OWENS
JOHN PERLICH
CATHY WILLIAMS

ADDITIONAL SUPPORT

ACADEMIC AFFAIRS
OFFICE OF THE PRESIDENT
COMMUNICATIONS AND MARKETING
INFORMATION TECHNOLOGY SERVICES
LAKELAND PUBLIC TELEVISION
PAUL BUNYAN BROADCASTING
JULIE LARSON
CHRISTY HARRIS
TERESA LAFRINIÈRE

FACILITATORS AND STUDENT SPONSORS

LISTED IN THE ORAL AND POSTER SECTIONS

PROGRESSION

By Meghan Trimble

Before we were students, we were toddlers
Scribbling stick figures into sketch books,
Writing stories riddled with dreams,
Practicing chemistry with Coke and Mentos.

As children, we recited poems we wrote during recess,
Donned ourselves as police officers for Halloween,
Placing plastic stethoscopes on toys,
Performing songs for our guardians in the living room.

Our teenaged years explored the ways
We change the world around us-
How thought translates into action,
Inciting change when change is needed.

Today, we represent the future,
Sharing our years' worth of findings
With those who helped us get here.
Poets diving into notebooks full of verse.

Psychologists discovering the next monumental therapy,
and solving the continuing puzzle of mental health.
We are business majors compiling numbers
into ambition, adding up and up until it becomes a reality.

Criminal Justice majors with the intention
of making our world a safer place.
Musicians with an ear for the sound
of peers' hearts beating as one.

We are also closer than ever to finding the answers
to the world's persistently difficult questions.
Although we may not have all its solutions yet,
Tomorrow's discoveries will become today's achievements.



BEMIDJI
STATE UNIVERSITY



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